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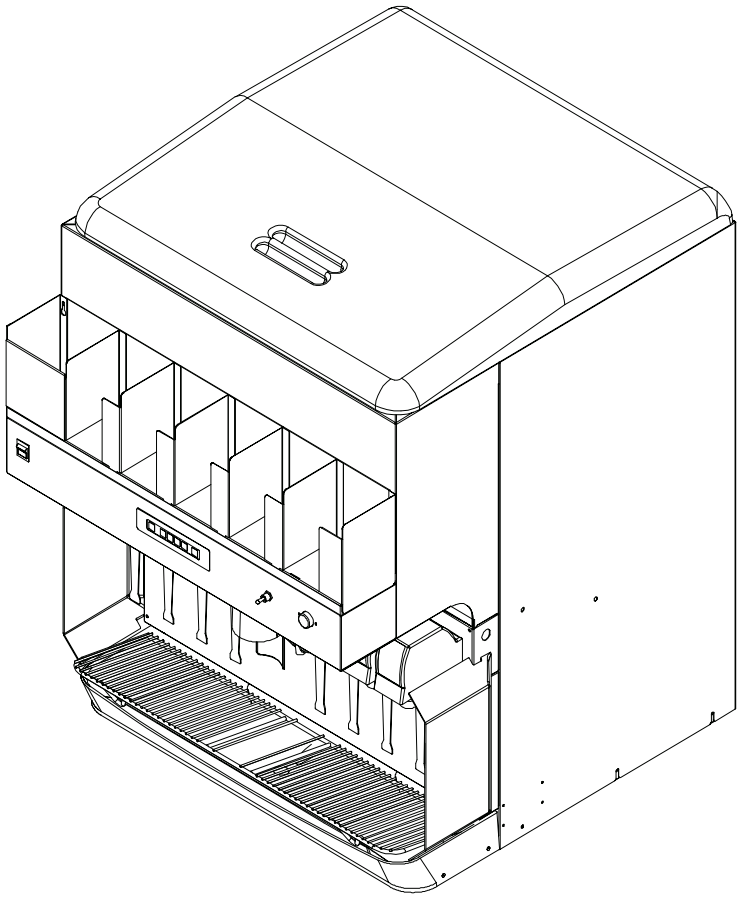
Installation Manual
DURAFLEX ICE/BEVERAGE DISPENSER
Model: DF-250 BCP

IMPORTANT:

TO THE INSTALLER.

It is the responsibility of the Installer to ensure that the water supply to the dispensing equipment is provided with protection against backflow by an air gap as defined in ANSI/ASME A112.1.2-1979; or an approved vacuum breaker or other such method as proved effective by test.

Water pipe connections and fixtures directly connected to a potable water supply shall be sized, installed, and maintained according to Federal, State, and Local Codes.



Part No. 620919541
Revised: July, 2001
Revision A
Control Code A

THIS DOCUMENT CONTAINS IMPORTANT INFORMATION
This Manual must be read and understood before installing or operating this equipment

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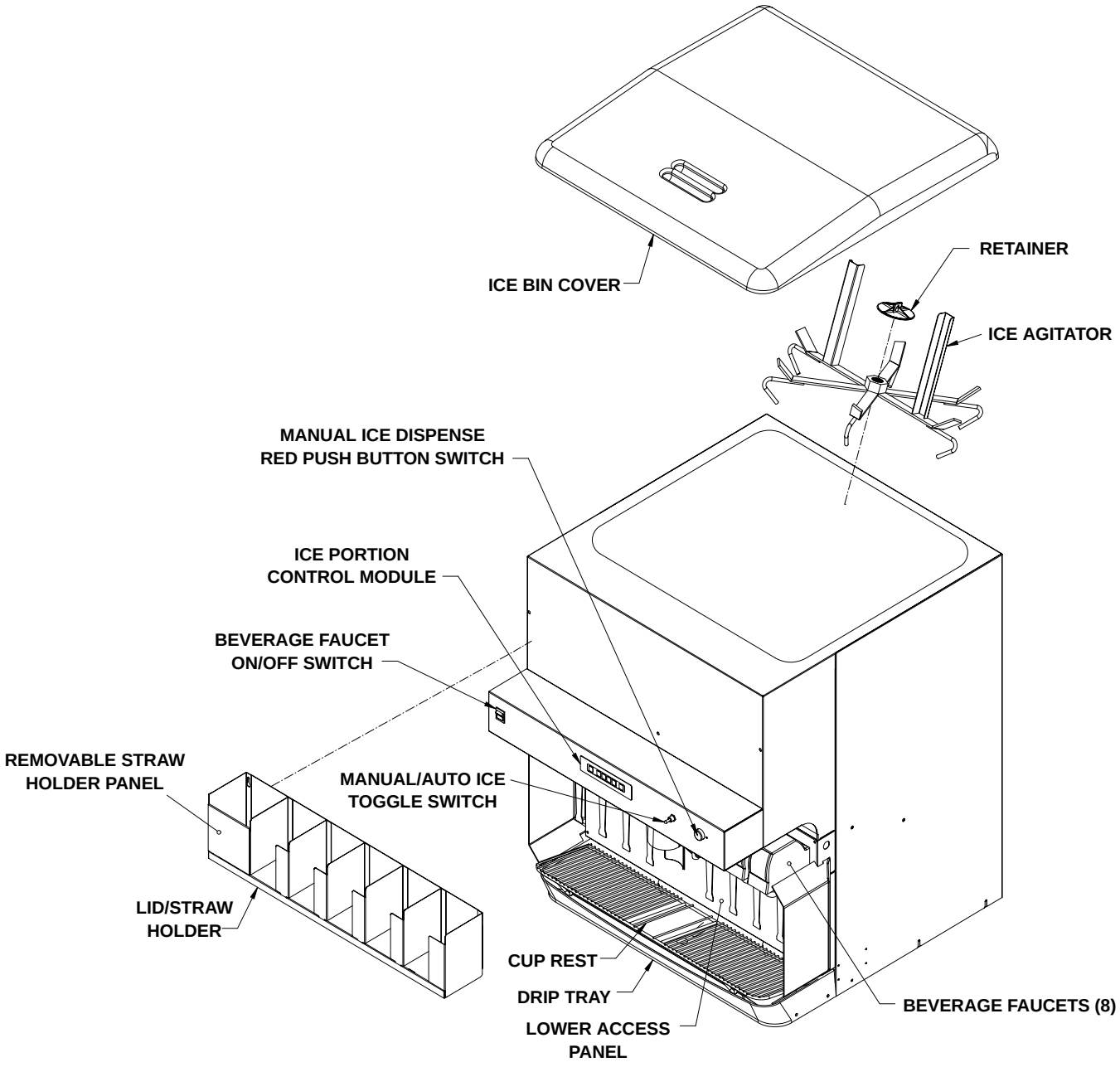


FIGURE 1. PARTS IDENTIFICATION

SAFETY PRECAUTIONS

Always: Disconnect power to the dispenser before servicing or cleaning.

Never: Place hands inside of hopper or gate area without disconnecting power to the dispenser. Agitator rotation occurs automatically when dispenser is energized!

This ice dispenser has been specifically designed to provide protection against personal injury and eliminates contamination of ice.To insure continued protection and sanitation, observe the following:

ALWAYS: Be sure the removable lid is properly installed to prevent unauthorized access to the hopper interior and possible contamination of the ice.

ALWAYS: Be sure the upper and lower front panels are securely fastened.

ALWAYS: Keep area around the dispenser clean of ice cubes.

CAUTION: Dispenser cannot be used with crushed or flaked ice. Use of bagged ice which has frozen into large chunks can void warranty. The dispenser agitator is not designed to be an ice crusher. Use of large chunks of ice which "jam up" inside the hopper will cause failure of the agitator motor and damage to the hopper. If bagged ice is used, it must be carefully and completely broken into small, cube-sized pieces before filling into the dispenser hopper.

DESCRIPTION

The "DURAFLEX" series of ice dispensers solves your ice and beverage service needs in a sanitary, space saving, economical way. Designed to be manually filled with ice from any remote ice making source, these dispensers will dispense cubes (up to 1-1/4 in. in size), cubelets, and hard-chipped or cracked ice; and in addition, several flavors of post–mix beverages. The unit includes beverage faucets and a cold plate and is designed to be supplied direct from syrup tanks and a carbonator, with no additional cooling required.

SPECIFICATIONS

Model	**DF250 BCP**
	B (Beverage Faucets)
	C (Cold Plate)
	P (Pneumatic ice portioning system)
Ice storage	250 pounds
Maximum No. of Beverage Faucets Available	8
Cold Plate (Built–In)	Yes
Electrical	120/1/60, 3.5 Amps
Dimensions	30 in. Wide X 30-11/16 in. Deep X 39-5/8 in. High

INSTALLATION INSTRUCTIONS

1. Locate the dispenser indoors on a level counter top.

   The ice dispenser must be sealed to the counter. The MOUNTING TEMPLATE (see Figure 3) indicates where openings can be cut in the counter. Locate the desired position for the dispenser, then mark the outline dimensions on the counter using the MOUNTING TEMPLATE. Cut openings in the counter.

   Rotate the line support bracket, located under base, to the up position and route all the lines below the bracket.

   Apply a continuous bead of National Sanitation Foundation (NSF) listed silastic sealant (Dow 732 or equal) approximately 1/4" inside of the unit outline dimensions and around all openings. Then, position the unit on the counter within the outline dimensions. All excess sealant must be wiped away immediately.

2. The beverage tubes, drain tube and power cord are routed through the large opening in the bottom of the unit. See the MOUNTING TEMPLATE (see Figure 3), for locating the required clearance hole in the counter for these utility lines.

3. DRIP TRAY DRAIN ASSEMBLY (see Figure 2). Route the drain tube to an open drain with the end of the tube above the "flood" level of the drain. Use the tubing, fittings, clamps, and insulation provided with the Dispenser to assemble the drain. The completed drain line *must* pitch continuously downward and contain no "traps" or improper drainage will result.

NOTE: This equipment must be installed with adequate backflow protection to comply with federal, state, and local codes.

4. Connect the beverage system product tubes as indicated in the Flow Diagram. This work should be done by a qualified Service Person. Any non-carbonated water tubing must be connected to the outlet of the check valve.

Note: See the Flow Diagram (see Figure 4) or decal on lower front panel of the unit for the location of syrup and water connections.

Note: Water pipe connections and fixtures directly connected to a potable water supply shall be sized, installed and maintained according to Federal, State and Local Laws.

5. **ICE PORTION CONTROLLER:** Regulated CO_2 gas pressure is required to operate the portion control dispensing system. Proceed as follows to connect the CO_2 gas pressure source line to the dispenser.

   A. Connect and route the CO_2 line from outlet side of the source regulator assembly up to the dispenser. NOTE: That the minimum source-regulated pressure is 40 psig.

   B. Connect the CO_2 source line to dispenser inlet line labeled "CO_2".

   C. The dispenser regulator outlet pressure is factory preset to 34 psig $\pm$ 2 psig **DO NOT ADJUST.**

IMPORTANT: Maximim CO_2 operating pressure is 50 psig.

6. Clean the hopper interior (see Owner's Manual P/N 620916502 for cleaning instructions).

7. Connect the power cord to a 120 volt, 60 cycle, 3–wire grounded receptacle.

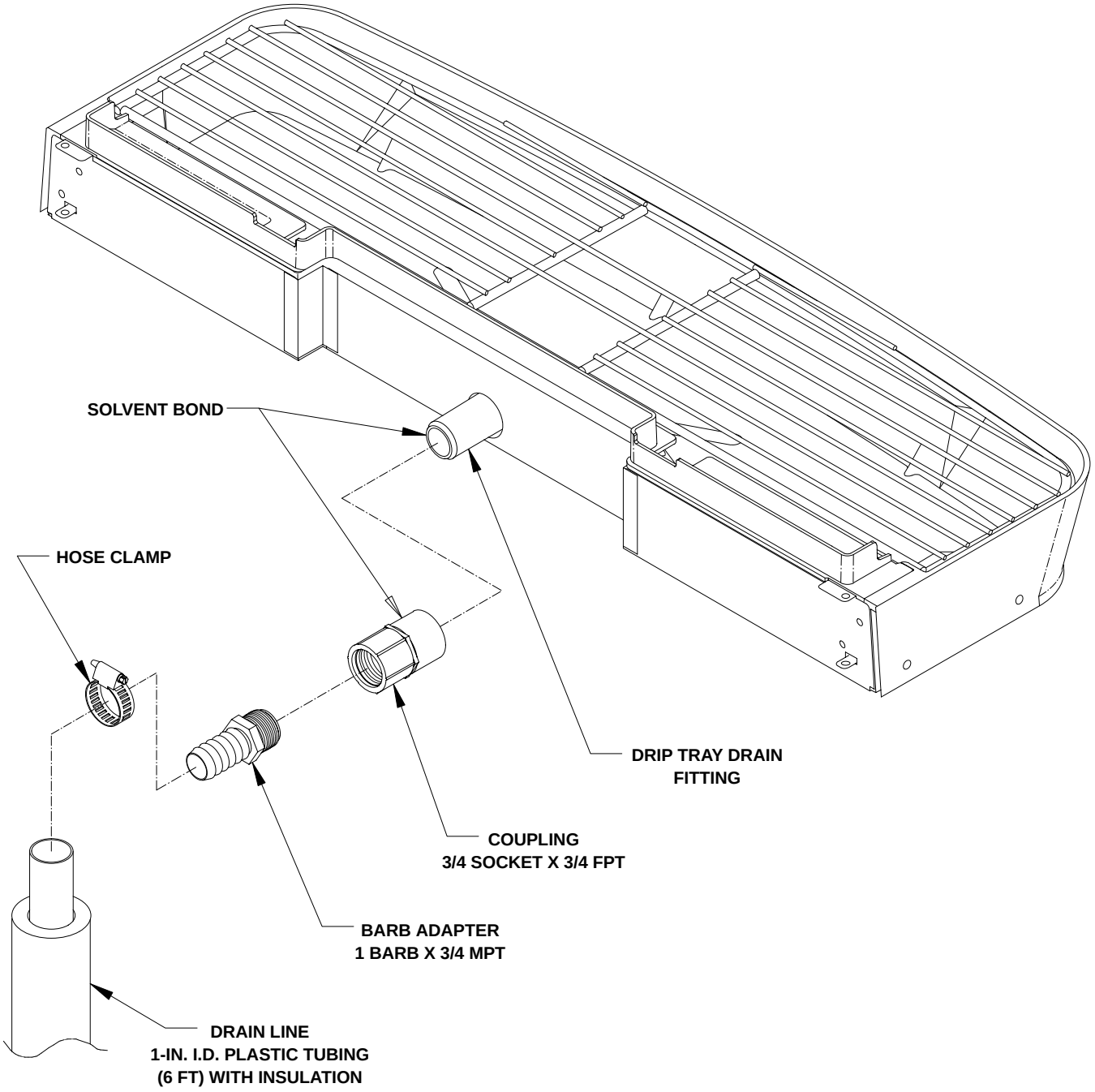


FIGURE 2. DRIP TRAY DRAIN ASSEMBLY

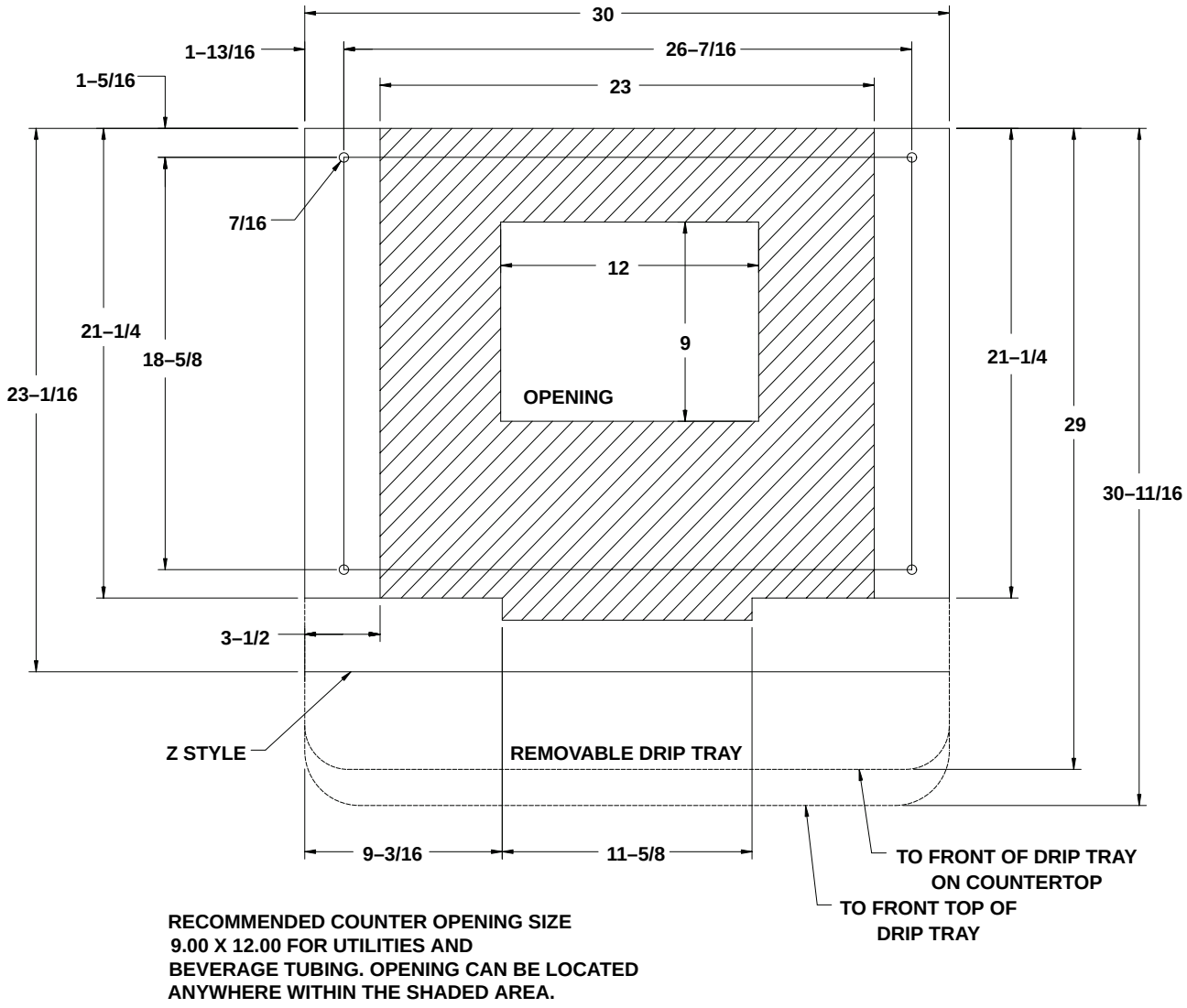
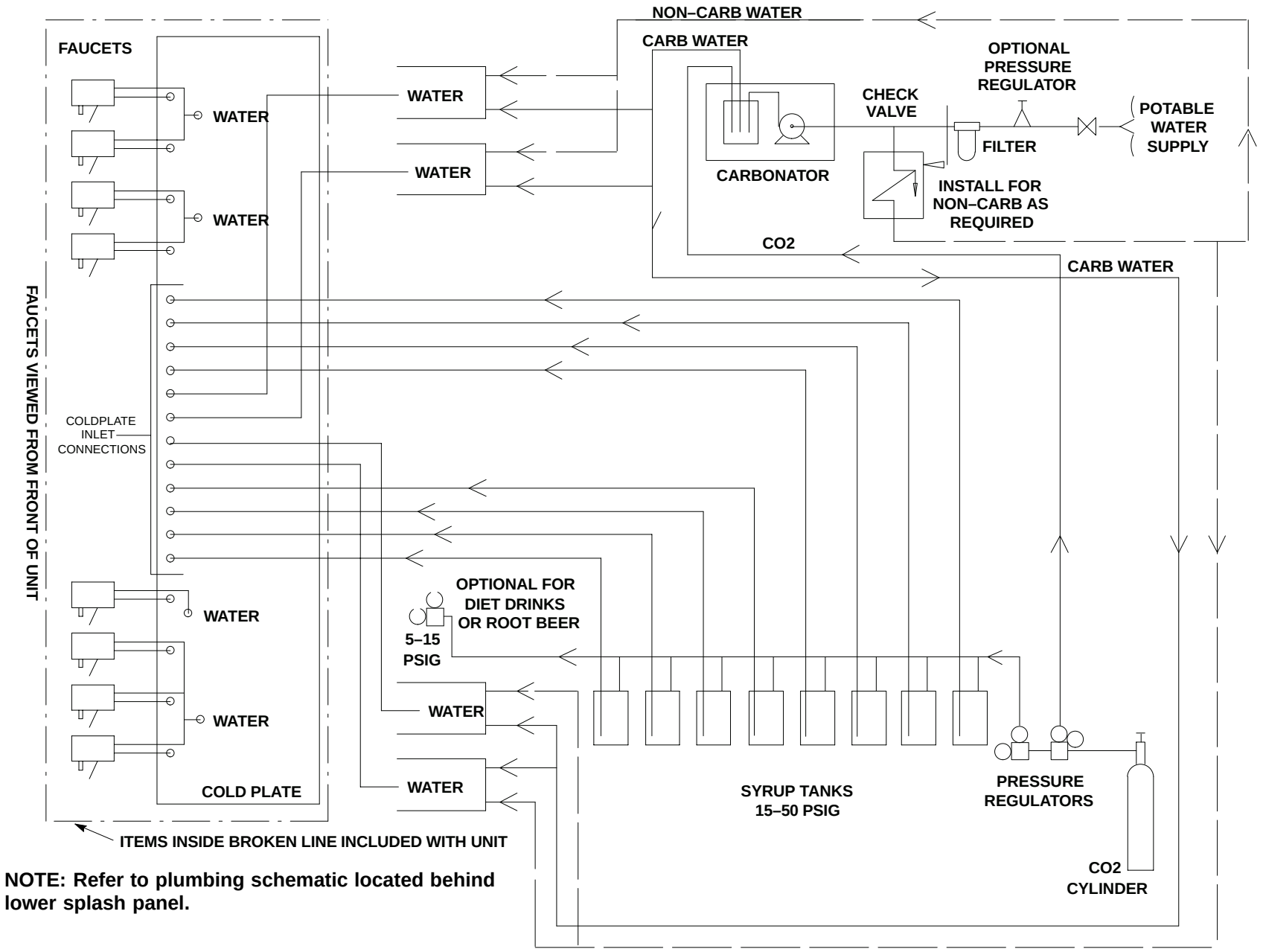


FIGURE 3. MOUNTING TEMPLATE



NOTE: Refer to plumbing schematic located behind lower splash panel.

FIGURE 4. FLOW DIAGRAM (BEVERAGE VALVE MANIFOLD R TO L 3.1.2.2)

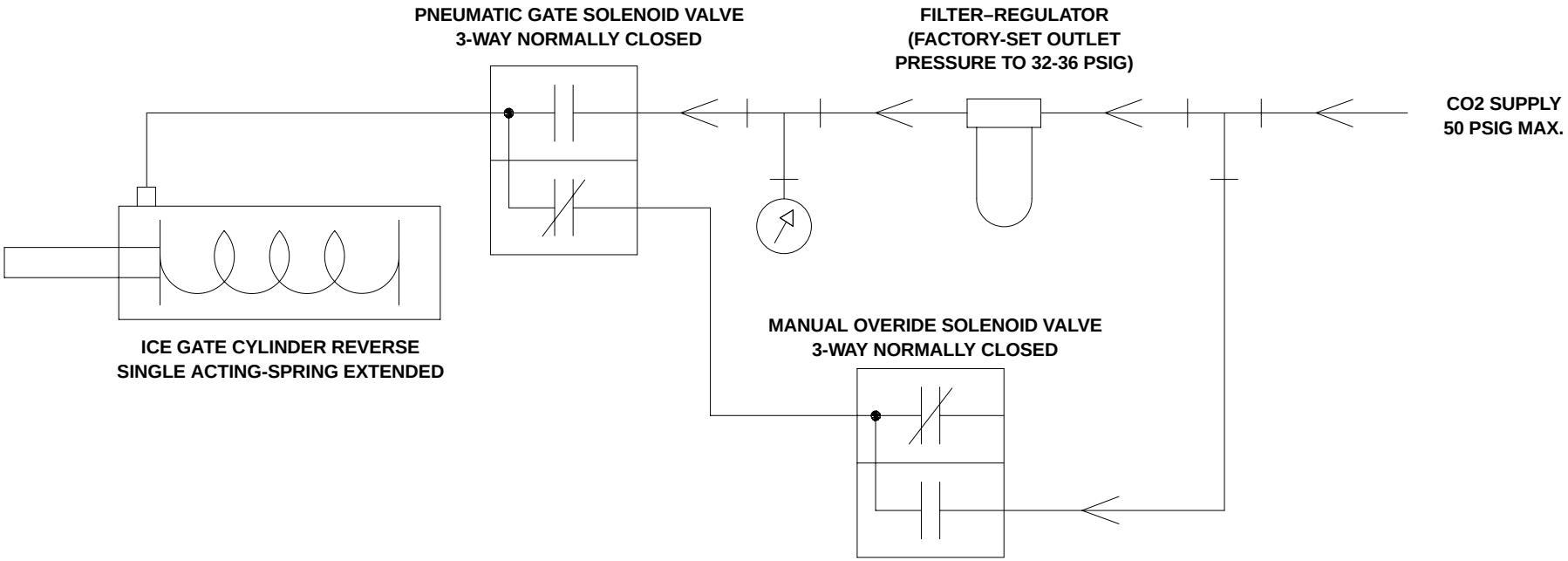


FIGURE 5. FLOW DIAGRAM (PNEUMATIC ICE GATE)

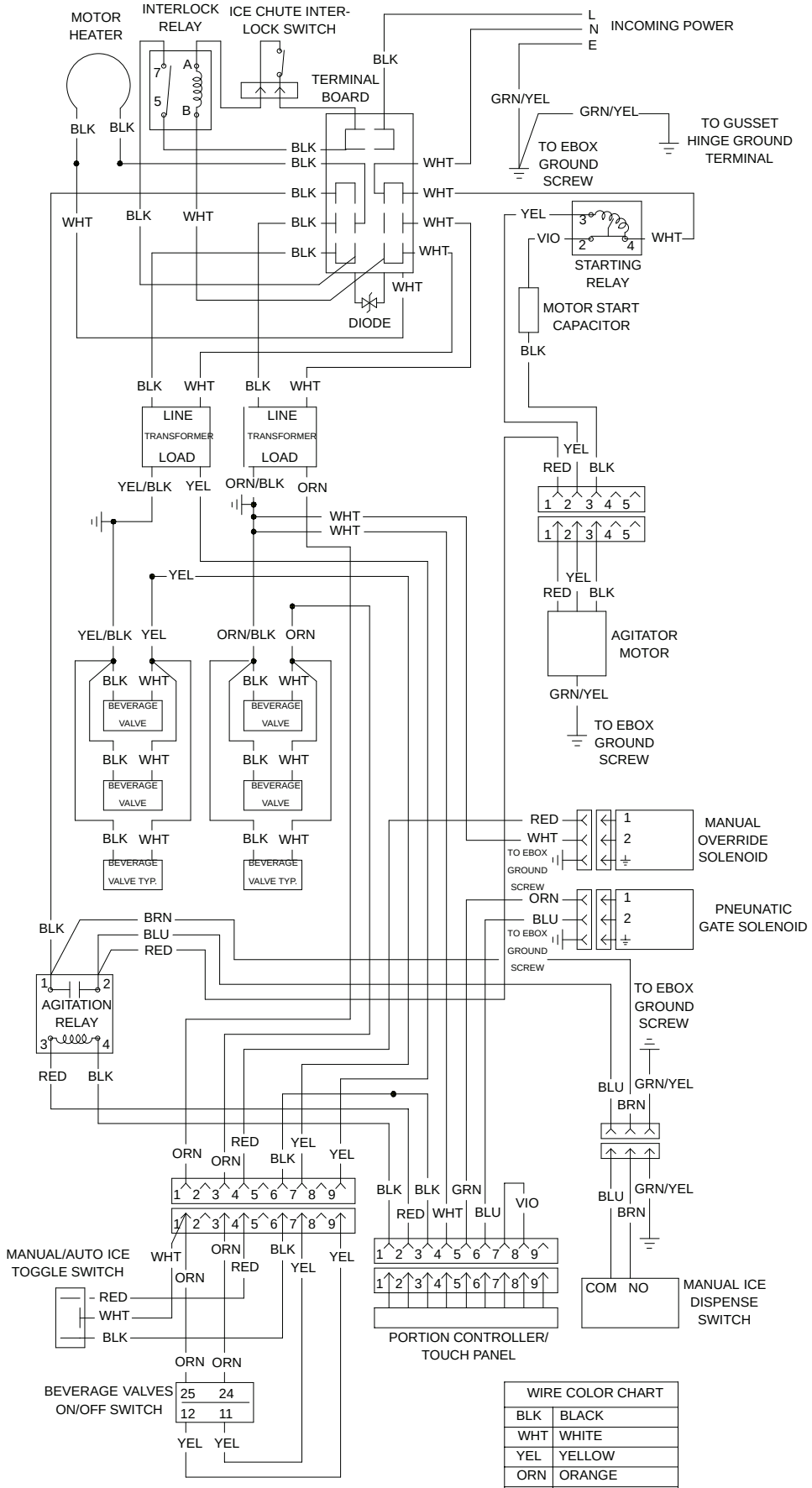


FIGURE 6. WIRING DIAGRAM (115 VOLT UNIT)

WIRE COLOR CHART	
BLK	BLACK
WHT	WHITE
YEL	YELLOW
ORN	ORANGE
BRN	BROWN
VIO	VIOLET
BLU	BLUE
RED	RED
GRN	GREEN
GEN/YEL	GREEN W/YELLOW STRIP

LEGEND	
●	SPLICE/QUICK CONNECT CONNECTION
⏚	GROUND
	MALE HARNESS CONNECTOR
	FEMALE HARNESS CONNECTOR

DANGER!
ELECTRIC SHOCK HAZARD. DISCONNECT POWER BEFORE SERVICING UNIT

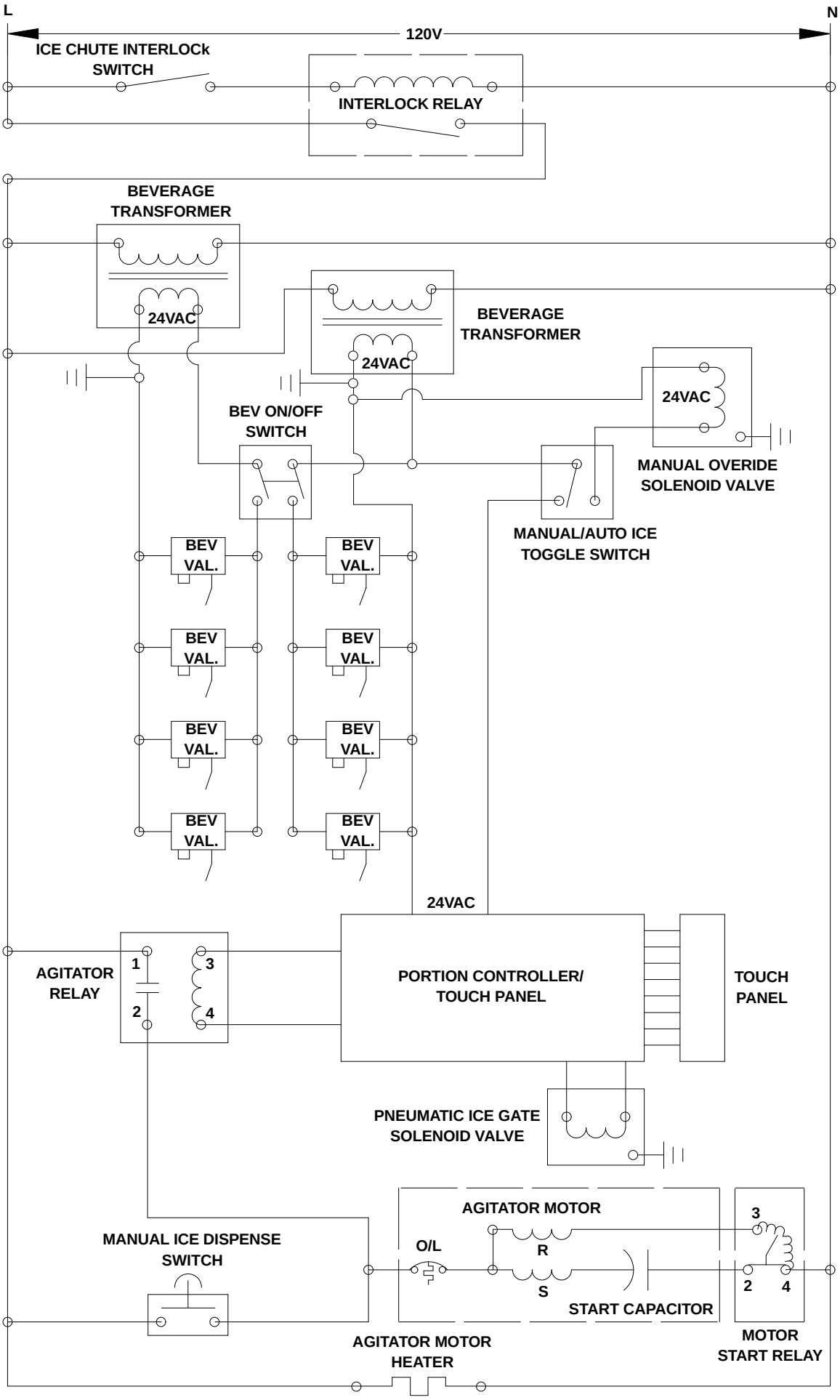


FIGURE 7. WIRING SCHEMATIC (115 VOLT)

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TROUBLESHOOTING

IMPORTANT: Only qualified personnel should service internal components or electrical wiring.

WARNING: If repairs are to be made to the beverage system, remove quick disconnects from the applicable product tank, then relieve the system pressure before proceeding. If repairs are to be made to the CO_2 system, stop dispensing, shut off the CO_2 supply, then relieve the system pressure before proceeding. If repairs are to be made to the ice dispensing system, make sure electrical power is disconnected from the unit.

Trouble	Probable Cause	Remedy
NOTE: should your unit fail to operate properly, check that there is power to the unit and that the hopper contains ice. If the unit does not dispense, check the following chart under the appropriate symptoms(s) to aid in locating the defect.		
BLOWN FUSE OR CIRCUIT BREAKER.	A. Short circuit in wiring (115V circuit).	A. Replace defective wiring.
	B. Defective agitator motor.	B. Replace agitator motor.
SLUSHY ICE. WATER IN HOPPER	A. Blocked drain.	A. Open–up/flush out drain.
	B. Unit not level.	B. Level unit.
	C. Poor ice quality due to water quality or ice maker problems.	C. Install water filter system. For Icemaker problems, consult icemaker manual.
	D. Improper use of flaked ice.	D. Replaced flaked ice with “cube style ice (see page 2, Unit Description).
BEVERAGES DO NOT DISPENSE.	A. No 24 volt power to faucets.	A. Check that beverage switch is “on”. Check 24V transformers.
	B. No CO_2 pressure.	B. Check CO_2 regulator. Check CO_2 tank pressure.
BEVERAGES TOO SWEET.	A. Carbonator not working.	A. Check carbonator.
	B. No CO_2 pressure in carbonator.	B. Check CO_2 regulator. Check CO_2 tank pressure.
	C. Faucet brix requires adjusting.	C. Brix Faucet.
BEVERAGES NOT SWEET ENOUGH.	A. Empty syrup tank.	A. Refill syrup tank.
	B. Faucet Brix requires adjusting.	B. Brix Faucet.
BEVERAGES NOT COLD (UNITS WITH BUILD-IN COLD PLATE).	A. Unit standing with no ice in hopper - no ice in cold plate cabinet.	A. Refill hopper with ice.
NOTE: Contact your local syrup or beverage equipment distributor for additional information and trouble shooting of beverage system.		
NO ICE DISPENSED FROM ICE PORTION CONTROLLER	A. Insufficient ice supply in ice bin.	A. Replenish ice supply as required.
	B. Ice in ice bin bridged (stuck together).	B. Gently tap on ice to break it loose.
	C. No electrical power to dispenser.	C. Plug in dispenser power cord, or check fuse or circuit breaker.

Trouble	Probable Cause	Remedy
NO ICE DISPENSED FROM ICE PORTION CONTROLLER (CONTINUED)	D. Insufficient or no CO_2 supply to dispenser.	D. Restore CO_2 supply to dispenser.
	E. Ice chute cover not properly Installed.	E. Make sure that cover is “snapped” into place.
	F. Defective ice chute interlock switch.	F. Replace interlock switch.
	G. Defective interlock relay.	G. Replace relay.
	H. Defective 24V transformer.	H. Replace transformer.
	I. Defective portion controller.	I. Replace controller.
	J. Defective ice gate cylinder.	J. Replace cylinder.
	K. Defective ice gate solenoid valve.	K. Replace solenoid valve.
	L. Agitation relay wiring incorrect.	L. Red wire should be connected to “+” terminal (no. 3) of relay coil.
	M. Defective agitation relay.	M. Replace relay.
	N. Defective agitator motor or start capacitor or start relay.	N. Replace defective component.
NO ICE DISPENSED FROM MANUAL ICE DISPENSE PUSHBUTTON SWITCH	A. Manual/Auto toggle switch in “Auto” position.	A. Move toggle switch to “Manual” position.
	B. Insufficient or no CO_2 supply to dispenser.	B. Restore CO_2 supply to dispenser.
	C. Defective 24V transformer.	C. Replace transformer.
	D. Defective manual override solenoid valve.	D. Replace valve.
	E. Defective manual ice dispense pushbutton switch.	E. Replace switch.
	F. Defective agitator motor or start capacitor or start relay.	F. Replace defective component.
	G. Defective ice gate cylinder.	G. Replace cylinder
ICE DISPENSING DURING AUTOMATIC AGITATION	A. Manual/Auto toggle switch in “manual” position.	A. Move toggle switch to “auto” position.
	B. Defective ice gate cylinder.	B. Replace cylinder.
	C. Defective ice gate solenoid valve.	C. Replace valve.
	D. Defective portion controller.	D. Replace controller.

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WARRANTY

IMI Cornelius Inc. warrants that all equipment and parts are free from defects in material and workmanship under normal use and service. For a copy of the warranty applicable to your Cornelius product, in your country, please write, fax or telephone the IMI Cornelius office nearest you. Please provide the equipment model number and the date of purchase.

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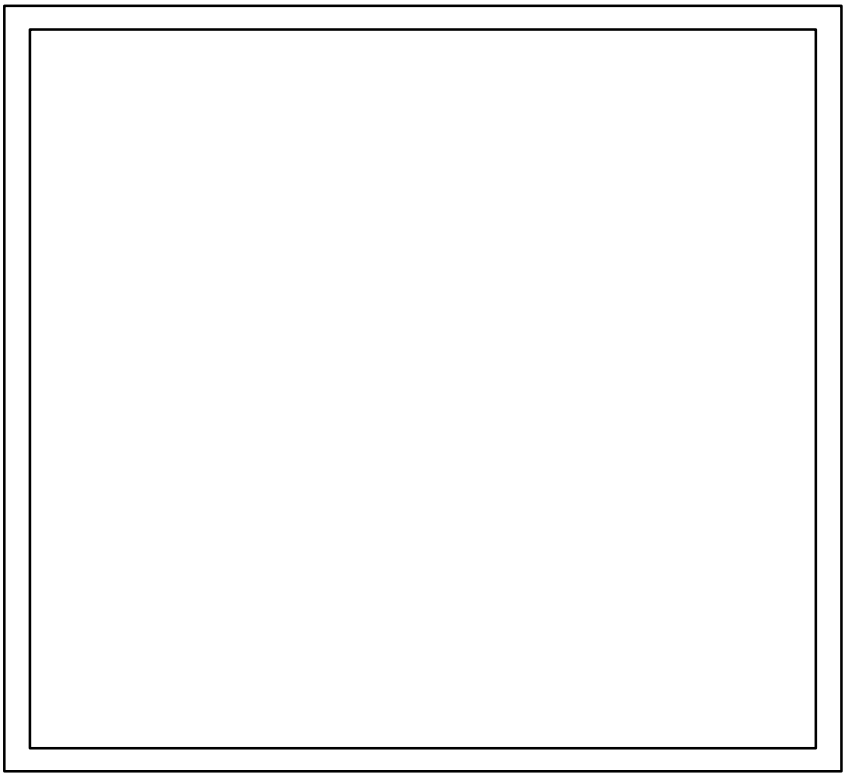

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